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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/008,657	11/09/2001	Jeffrey Oliver	100.339US01	7351
34206	7590	08/24/2005	EXAMINER	
FOGG AND ASSOCIATES, LLC P.O. BOX 581339 MINNEAPOLIS, MN 55458-1339			ROBERTS, BRIAN S	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/008,657	<b>Applicant(s)</b> OLIVER ET AL.	
	<b>Examiner</b> Brian Roberts	<b>Art Unit</b> 2662	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) <sup>46</sup>1-24 is/are pending in the application.
- 4a) Of the above claim(s) <sup>25-46</sup>25-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>24 APR 2003</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

- Claims 1-24 have been examined.
- Claims 25-46 have been withdrawn.

### ***Election/Restrictions***

- I. Claim 1-24, drawn substantially to "Fault Detection", classified in class 370, subclass 242.
- II. Claims 25-46, drawn substantially to "Fault Recovery", classified in class 370, subclass 216.

1. Inventions of group 1 and group 2 are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the invention of group 1 discloses a fault monitoring system that has the independent utility of monitoring the transmission characteristics of a system. The subcombination of group 2 has separate utility such as a fault recovery method in the event of a fault is detected in a transmission system.

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Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with Laura Ryan on 08/04/2005 a provisional election was made without traverse to prosecute the invention of group 1, claims 1-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 25-46 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Specification***

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6-12 and 14-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160)

- In reference to claims 1,10,16, and 21

Ganesan et al. teaches in Figure 15

- An Input/Output port manager (IOPM 612) connected to the IO Cards (614) that indicates when T1 line failures occur by frequently polling the IO Cards (614) (column 15 lines 66-67)
- The IOPM (612) maintains and reports to the Operation Maintenance Center the status of the I/O ports (OMC 70) (column 16 lines 1-2)
- The IOPM (612) also monitors T1 I/O ports for alarm conditions and reports events to the OMC (70). The IOPM (612) may perform switchover for backup T1 cards in response to alarm conditions (column 16 lines 2-6)

Ganesan et al. does not explicitly teach the IOPM (612) maintaining a system information database.

Ganesan et al. teaches a radio port controller (RPC 330) with a database to store equipment configuration and subscriber information. (column 16 lines 7-17)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the IOPM to include a database in order to orderly store the status information and alarm conditions of the T1 I/O ports before the IOPM reports the information to the OMC.

- In reference to claims 2,12, and 20

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches monitoring for failures and alarm conditions. (column 16 lines 2-4)

- In reference to claims 3,11,19, and 23

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches the IOPM (612) performing switchover for backup T1 cards in response to alarm conditions or an operator request. (column 16 lines 4-6)

- In reference to claim 4

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches the IOPM (612) monitoring the T1 I/O ports for alarm conditions and reporting the events to the OMC (70) (remote unit) (column 16 lines 1-4)

- In reference to claims 6-8,14-15,17-18, and 22

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim. Ganesan et al. further teaches hardware components comprising T1 cards. (column 15 lines 66-67)

Ganesan et al. does not teach E1 cards or the T1 cards including a driver.

Official Notice is taken that an E1 card is the European equivalent to a T1 card and that each card contains a driver.

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It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system to include E1 cards so that the system could be deployed in Europe and conform to the European communication standards.

- In reference to claim 9

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim. In Figure 15, Ganesan et al. further teaches an interface between the IOPM (612) and T1 cards.

6. Claims 5 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view Chang et al. (US 6167279)

- In reference to claims 5 and 13

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim.

Ganesan et al. does not teach an embedded operations channel.

In Figure 1, Chang et al. teaches an embedded operations channel between a radio port (3) and radio port controller unit (4). (column 4 lines 8-11)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the system of Ganesan et al. to include a embedded operations channel as taught by Chang et al. because the embedded operations channel provides a specific administration and maintenance channel to transmit system status information and alarm conditions.

7. Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ganesan et al. (US 5727160) in view of Major et al. (US 5455932).

- In reference to claim 24

Ganesan et al. teaches a system that covers substantially all limitations of the parent claim.

Ganesan et al. does not explicitly teach a message queue to receive alarm change messages.

Major et al. teaches a message queue to receive messages in a fault-tolerant data processing system. (abstract)

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the IOPM (612) to include a message queue as taught by Major et al. because it allows the IOPM to receive the messages sequentially regardless of the timing of the messages.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are:

- Reynaud et al. (US 5909480) teaches an apparatus for monitoring a telecommunications system.
- Scrandis et al. (US 6414595) teaches a method and system for processing alarms with a database connected to a controller.



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- Chari et al. (US 6425006) teaches an alert configurator and manager in a computer system.
- Vepa et al. (US 6512774) teaches a method and system for detecting a non-functioning network interface card (NIC) in a server computer system.
- Chavez et al. (US 6687749) teaches a method and system for reporting and resolving support incidents on a computer.
- Colton et al. (US 3996423) teaches a common control failure alarm apparatus.
- Katzman et al. (US 4672537) teaches a data error detection and device controller failure detection in an input/output system.

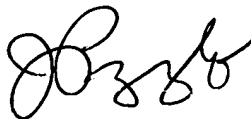
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Roberts whose telephone number is (571) 272-3095. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BSR  
08/05/2005



**JOHN PEZZLO**  
**PRIMARY EXAMINER**